Amendments to and listing of the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application, wherein deleted language is noted by double brackets and/or strikethrough font and additional language is underlined:

1. (Currently Amended) A hydrodynamic bearing comprising:

a sleeve having a bearing hole at the nearly central portion thereof,

a shaft rotatably inserted into said bearing hole of said sleeve, and

a nearly disc-shaped flange secured to one end of said shaft, one face of said flange opposing to the end face of said sleeve and the other face thereof opposing to a thrust plate provided to hermetically seal a region including said end face of said sleeve, wherein

herringbone-shaped first and second dynamic pressure generation grooves are provided on at least one of the inner circumferential face of said sleeve and the outer circumferential face of said shaft so as to be arranged in the direction along said shaft,

herringbone-shaped third dynamic pressure generation grooves are provided on at least one of the opposed faces of said flange and said thrust plate,

said first, second and third dynamic pressure generation grooves are filled with oil having a kinematic viscosity of 4 cSt or more at 40°C of temperature,

one of said sleeve and said shaft is secured to a base and the other is secured to a rotatable hub rotor, and

~~when~~ where the outside diameter of the herringbone pattern of said third dynamic pressure generation groove is designated as d1o, the inside diameter thereof is designated as d1i, the diameter of the turn-back part thereof is designated as d1m, and the diameter of the turn-back part of the herring pattern, wherein the oil pressure generated by said third dynamic pressure generation grooves in the direction from the outer circumference to the inner circumference of said flange becomes equal to the oil pressure generated in the direction from the inner circumference to the outer circumference thereof, is designated as dsy, the diameter d1m of said turn-back part is determined so that the following two equations are satisfied respectively:

$$d1m = dsy - (dsy - d1i) \times A$$

$$dsy = \{(d1i^2 + d1o^2)/2\}^{1/2}$$

[[(]]wherein A is a value of 0.05 or more to less than 1.0[[)]].

2. (Canceled)

3. (Currently Amended) A hydrodynamic bearing comprising:

a sleeve having a bearing hole at the nearly central portion thereof,

a shaft rotatably inserted into said bearing hole of said sleeve, and

a nearly disc-shaped flange, secured to one end of said shaft, one face of said flange opposing to the end face of said sleeve and the other face thereof opposing to a thrust plate provided to hermetically seal a region including said end face of said sleeve, wherein

herringbone-shaped first and second dynamic pressure generation grooves are provided on at least one of the inner circumferential face of said sleeve and the outer circumferential face of said shaft, among said first and second dynamic pressure generation grooves, ~~when~~ where the grooves away from said thrust plate are designated as said first dynamic pressure generation grooves and the grooves close thereto are designated as said second dynamic pressure generation grooves,

[[the]] a first length L1 of the groove portion which is away from said thrust plate in said herringbone-shaped first dynamic pressure generation groove in the direction of said shaft is larger than [[the]] a second length L2 of the groove portion which is close to said thrust plate in the direction of said shaft, and the value of a calculation expression, (L1 + L2)/(2 x L2) represented by said first length L1 and said second length L2, is in the range of 1.02 to 1.60,

said herringbone-shaped second dynamic pressure generation groove is made symmetric with respect to a line passing through [[the]] herringbone-shaped turn-back parts, ~~and the value of a calculation expression, (L1 + L2)/(2 x L2) represented by said first length L1 and said second length L2, is in the range of 1.02 to 1.60,~~

herringbone-shaped third dynamic pressure generation grooves are provided on at least one of the opposed faces of said flange and said thrust plate,

said first, second and third dynamic pressure generation grooves are filled with oil having a kinematic viscosity of 4 cSt or more at 40°C of temperature,

one of said sleeve and said shaft is secured to a base and the other is secured to a rotatable hub rotor, and

~~when~~ where the outside diameter of the herringbone pattern of said third dynamic pressure generation groove is designated as d1o, the inside diameter thereof is designated as d1i, the diameter of the turn-back part thereof is d1m, and the diameter of the turn-back part of the herring pattern, wherein the oil pressure generated by said third dynamic pressure generation grooves in the direction from the outer circumference to the inner circumference of said flange becomes equal to the oil pressure generated in the direction from the inner circumference to the outer circumference thereof, is designated as dsy, the diameter d1m of said turn-back part is determined so that the following equations are satisfied respectively:

$$d1m = dsy - (dsy - d1i) \times A$$

$$dsy = \{(d1i^2 + d1o^2)/2\}^{1/2}$$

[[{]]wherein A is a value 0.05 or more to less than 1.0[[}]].

4. (Previously Presented) A hydrodynamic bearing in accordance with claim 1, wherein said pattern is a spiral pattern in which the inside diameter d1i of said third dynamic pressure generation groove is equal to the diameter d1m of said turn-back part.

5. (Currently Amended) A hydrodynamic bearing in accordance with claim 1, wherein herringbone-shaped fourth grooves are provided on at least one of the opposed faces of said flange and said sleeve, and ~~when~~ where the outside diameter of the herringbone pattern of said fourth groove is designated as d2o, the inside diameter thereof is designated as d2i and the diameter of the turn-back part is designated as d2m, a relationship represented by $d2m = \{(d2i^2 + d2o^2)/2\}^{1/2}$ is satisfied.

6. (Previously Presented) A disc rotation apparatus for recording or reproducing signals, wherein a recording/reproduction disc is concentrically secured to said hub rotor of said hydrodynamic bearing in accordance with claim 1 and rotated, magnetic heads or optical heads are provided so as to be opposed to the faces of said rotating disc, and said magnetic heads or optical heads are configured so as to be movable in parallel with the faces of said disc.